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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,093	12/02/2003	Gary K. Lund	2507-6011US (22032-US)	6000
60794	7590	04/12/2006	EXAMINER	
TRASKBRITT, P.C. P.O. BOX 2550 SALT LAKE CITY, UT 84110			HWU, DAVIS D	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/727,093	Applicant(s) LUND ET AL.	
	Examiner Davis D. Hwu	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 25, 26, 28-53, 59, 60, 62-65, 68-78, 85, 87, 88 and 90 is/are rejected.
- 7) ☒ Claim(s) 17-24, 27, 54-58, 61, 66, 67, 79-84, 86 and 89 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/25/05, 4/18/05, 2/9/05, 12/29/03</u> | 6) <input checked="" type="checkbox"/> Other: <u>Fig. 2a</u> . |

DETAILED ACTION

1. The election/restriction requirement is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 15, 16, 25, 26, 28-35, 62, 63, 65, 68-70, 75-77, 85, 87, and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luxton et al.

Luxton et al. discloses an apparatus comprising a housing defining a first opening, a second opening and a flow path 6 providing fluid communication between the first and second openings, a gas-generating device located and configured to provide a flow of a gas into the flow path such that the flow of the gas draws a volume of fluid from a location outside the housing through the first opening and into the flow path (see Fig. 2a included herein), and a nozzle 1 as recited in claim 2, wherein the nozzle is configured to accelerate the flow of gas to supersonic or sonic velocities (column 8, lines 45-52) as recited in claim 3 and 4. The device of Luxton et al. can be used as a fire suppression apparatus since it includes all of the structural limitations of the instant invention. The ability to remove and replace critical parts would have been an obvious feature to one having ordinary skill in the art and regarding the plurality of openings as recited in claim 29, it has been held that mere duplication of the essential parts of a device involves only

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routine skill in the art. The use of steel as recited in claim 31 would have been a matter of design choice.

4. Claims 5-12, 71-74, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luxton et al. in view of Italiane et al.

Italiane et al. discloses a fire extinguisher comprising a gas-generating device including a solid propellant composition to generate a gas upon combustion. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated into the device of Luxton et al. a solid propellant composition in the gas generating device as taught by Italiane et al. since Italiane et al. teaches that such arrangements are known in the art.

5. Claims 13 and 14, 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luxton et al. in view of Italiane et al. as applied to claim 10 above, and further in view of Lundstrom.

Lundstrom teaches a solid pyrotechnic gas generant composition in which gas generated by the generant is passed through a filter to filter out solid material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Luxton et al. and Italiane et al. by providing a filter between the solid propellant and the nozzle in order to filter out solid material. The type of filter as recited in claim 14 would have been a matter of design choice.

6. Claims 36-50, 52, 53, 59, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luxton et al. in view of Italiane et al.

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Luxton et al. discloses an apparatus comprising a housing defining a first opening, a second opening and a flow path 6 providing fluid communication between the first and second openings, a gas-generating device located and configured to provide a flow of a gas into the flow path such that the flow of the gas draws a volume of fluid from a location outside the housing through the first opening and into the flow path (see Fig. 2a included herein), and a nozzle 1 as recited in claim 2, wherein the nozzle is configured to accelerate the flow of gas to supersonic or sonic velocities (column 8, lines 45-52) as recited in claim 44 and 45. Italiane et al. discloses a fire extinguisher comprising a gas-generating device including a controller to generate a signal and transmit the signal to the fire extinguisher upon the occurrence of a specified event, wherein the gas generating device provides the flow of gas upon receipt of the signal and a solid propellant composition to generate a gas upon combustion. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated into the device of Luxton et al. a controller to generate and transmit a signal as recited to activate the apparatus to suppress a fire and provide a solid propellant composition in the gas generating device as taught by Italiane et al. since Italiane et al. teaches that such arrangements are known in the art. The use of smoke, gas, temperature sensors, and alarms in fire extinguishing or suppression systems is well known in the art.

7. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luxton et al. in view of Italiane et al. as applied to claim 10 above, and further in view of Lundstrom.

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Lundstrom teaches a solid pyrotechnic gas generant composition in which gas generated by the generant is passed through a filter to filter out solid material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Luxton et al. and Italiane et al. by providing a filter between the solid propellant and the nozzle in order to filter out solid material.

8. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luxton et al. in view of Italiane et al. and Lundstrom.

The combination of Luxton et al., Italiane et al., and Lundstrom discloses the limitations of the device as stated above.

Allowable Subject Matter

9. Claims 17-24, 27, 54-58, 61,66, 67, 79-84, 86, and 89 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Garcia and Rich are pertinent to Applicant's invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can

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be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davis Hwu



DAVIS HWU
PRIMARY EXAMINER

